Getting Parking Right

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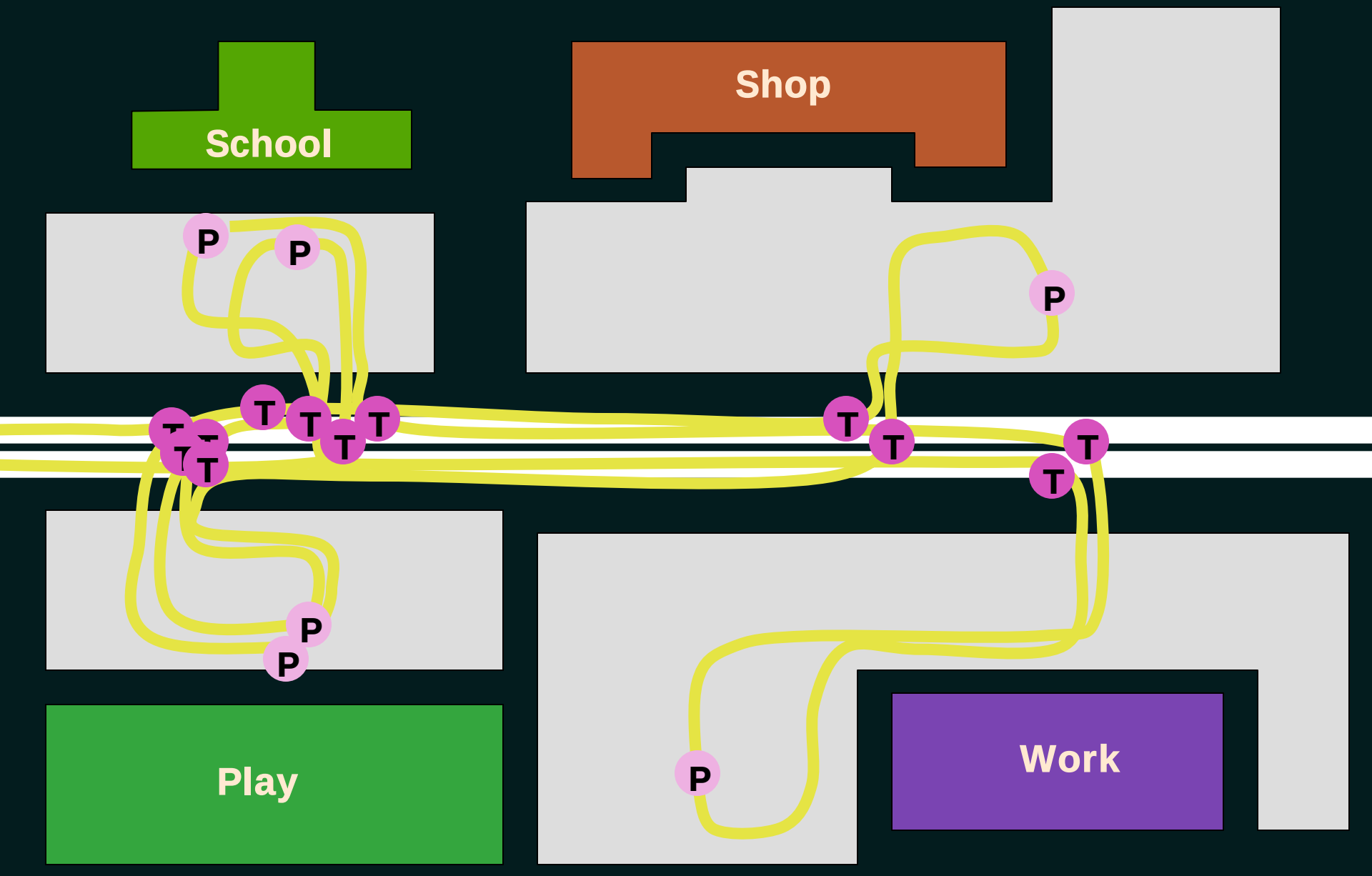
Six Key Parking Reform Principles

1. Manage Spillover Parking
2. Create a “Park Once,” shared parking environment
3. Create lots of on-street parking
4. Ensure good parking design
5. Ensure 15% vacancy at all times through market pricing
6. Vary parking requirements according to context and goals:
   - Tailor minimums
   - Eliminate minimums
   - Establish maximums

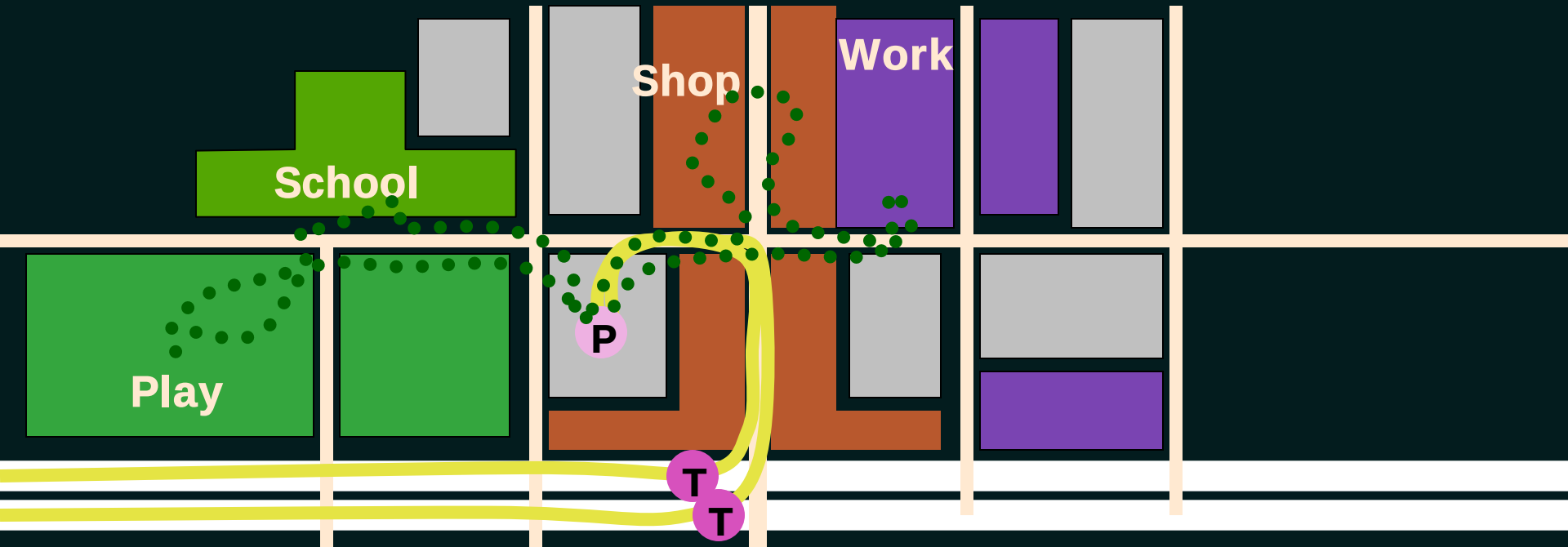
1. Residential Parking Permit Districts

- Residential Parking Permit Districts
  - Critical for addressing spillover parking concerns of infill development
  - Requires neighborhood vote on parking district
- Austin Parking Benefit Districts
  - http://www.ci.austin.tx.us/parkingdistrict/default.htm
  - Allows residents to sell surplus neighborhood parking capacity to commuters
  - Revenue returned to neighborhood for community improvements

Conventional Development



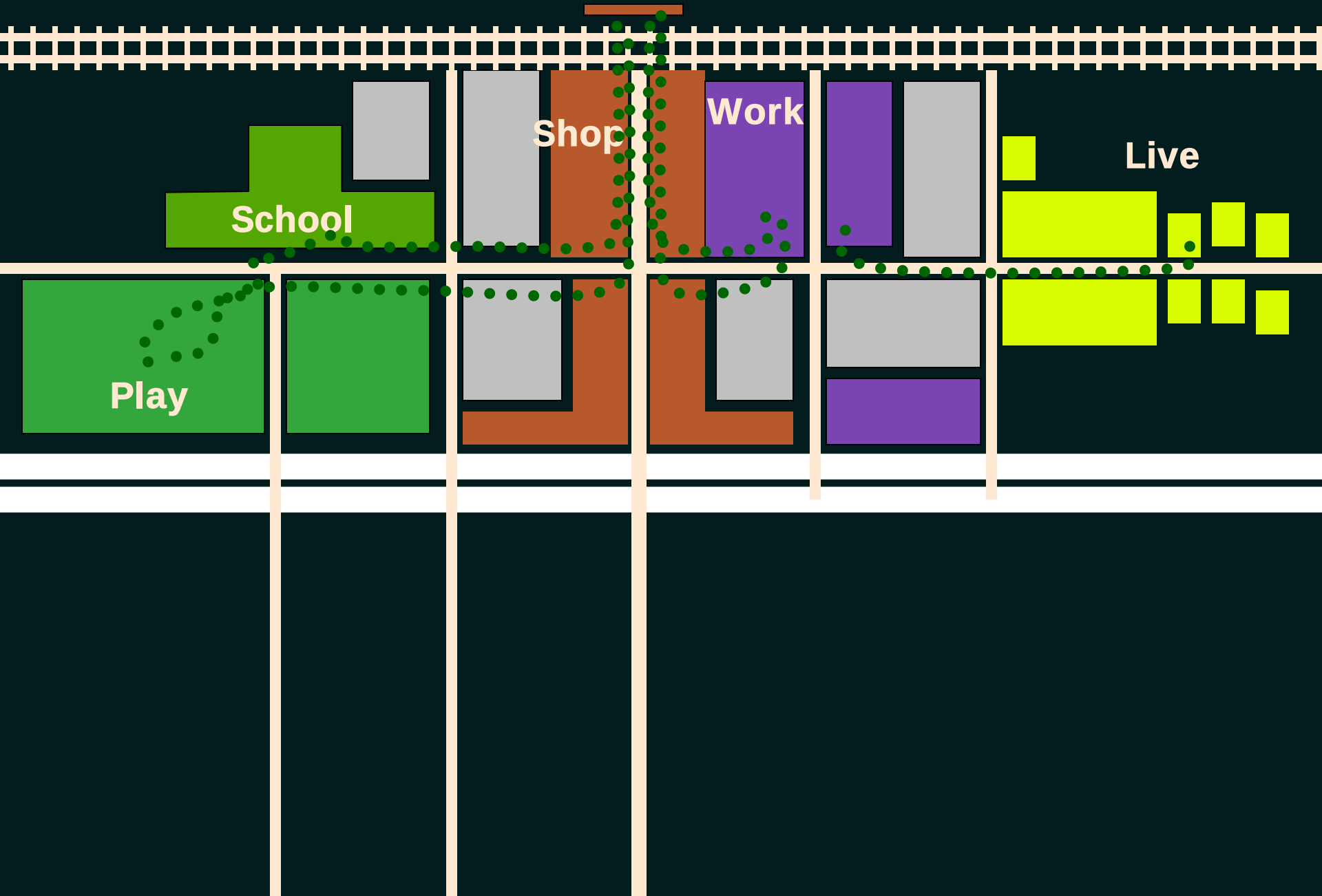
Mixed Use, Park Once District



Results:

- <½ the parking
- <½ the land area
- ¼ the arterial trips
- 1/6th the arterial turning movements
- <¼ the vehicle miles traveled

Transit Oriented Development



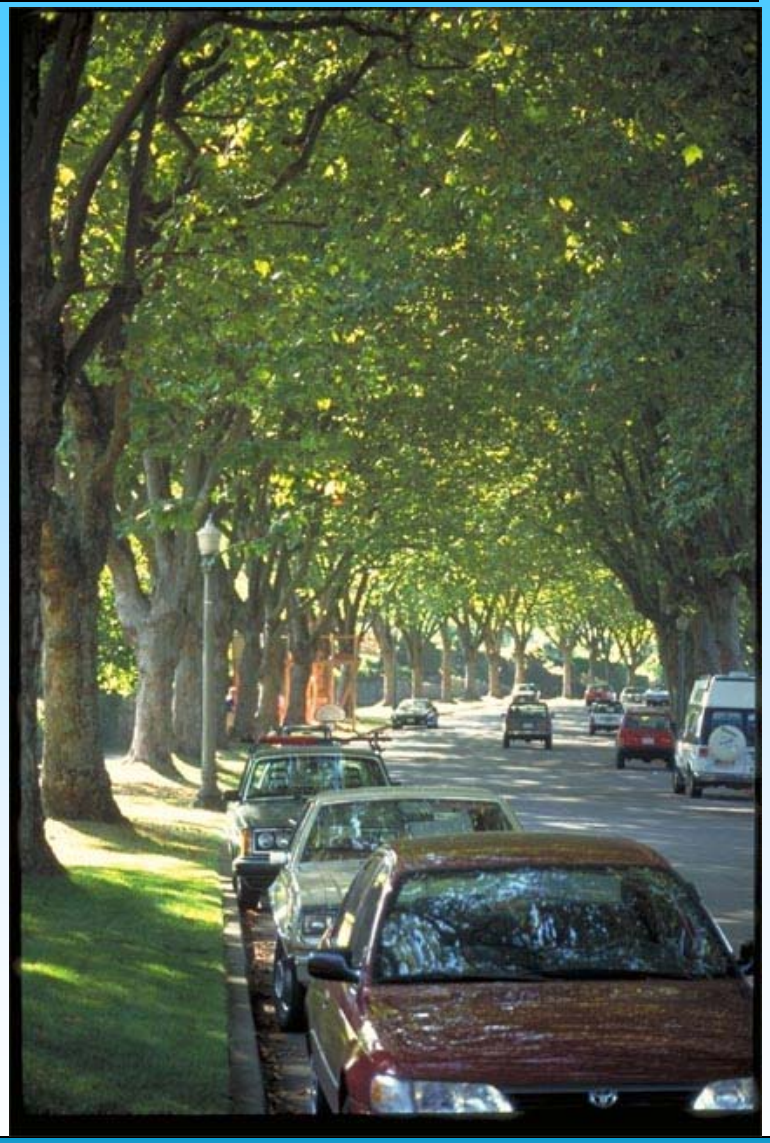
Parking Demand in Mixed Use Zones

- Typical single-use district – 4 spaces per 1,000 square feet
- Palo Alto – 1.8 spaces /1,000 sf
- Santa Monica – 2.4 spaces/1,000 sf
- Kirkland, WA – 2.0 spaces/1,000 sf
- Philadelphia Center City – 0.89 spaces /1,000 sf

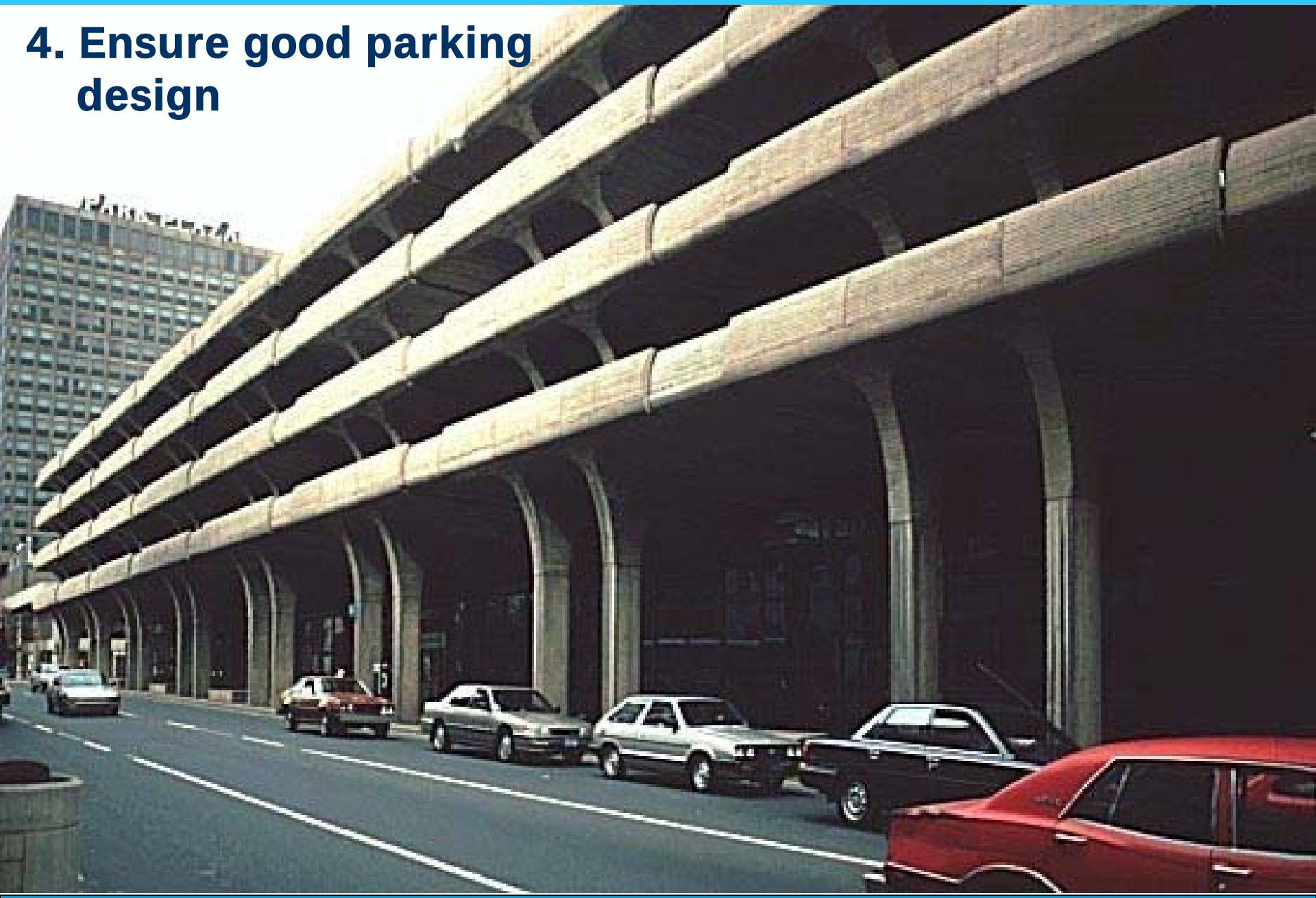
3. On-Street Parking

On-street parking benefits:

- Buffer between pedestrians and traffic
- Convenience parking for retail
- “Teaser” parking
- Snow removal storage
- Potential location for street trees, flex space
- Traffic calming
- Bus bulbs and Corner bulbouts
- Bike parking
- Same land area per space as 3-story garage; twice as efficient as off-street lot



4. Ensure good parking design



4. Ensure good parking design

5. Manage On-Street Parking


SOLE
ATM
Dr. Martens


Hours of Operation
Sunday - Thursday
11 AM to 8 PM
Friday - Saturday
11 AM to 12 midnight
Except Holidays
YOUR METER MONEY WILL
MAKE THE DIFFERENCE IN
OLD PASADENA
· SIGNAGE · LIGHTING
· BENCHES · PAVING
The City of Pasadena

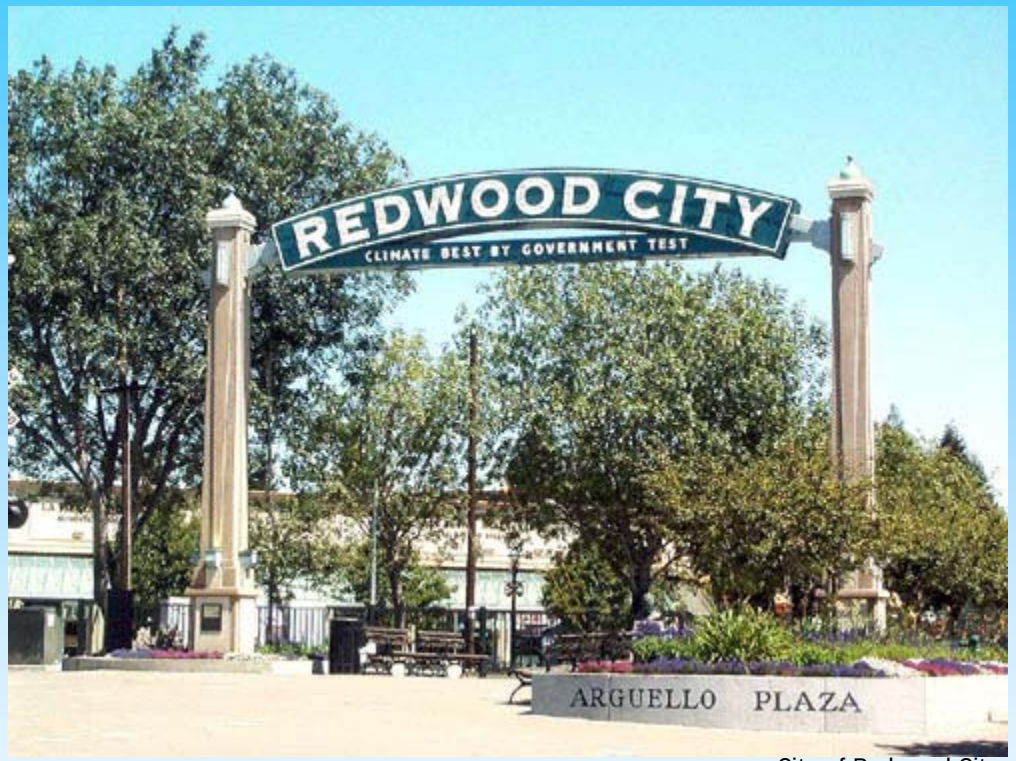
Parking Benefit Districts

- Devote meter & permit revenue to district where funds raised
- Example: Old Pasadena
  - Meters installed in 1993: $1/hour
  - Garage fees
  - Revenue: $5.4 million annually
  - Tiny in-lieu of parking fees
- Funds garages, street furniture, trees, lighting, marketing, mounted police, daily street sweeping & steam cleaning
- Focus on availability, not price

Old Pasadena,1992-99:
Sales Tax Revenues Quadruple

Parking Benefit Districts

- Redwood City, CA: Meter and garage rates vary to achieve 15% vacancy on all blocks at all times.
- http://www.redwoodcity.org/government/council/packets/2005/0606/Reg_050606-8A.pdf



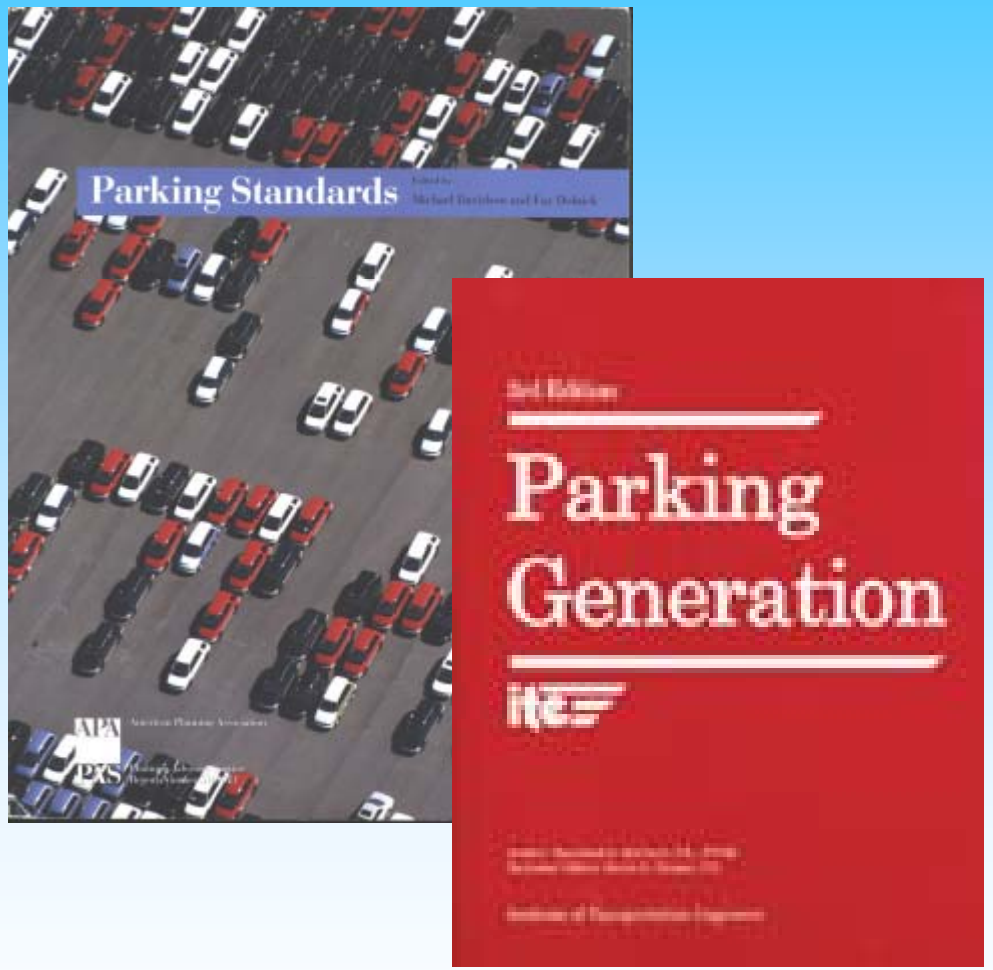
City of Redwood City

6. Vary your Parking Requirements

- Example: Boulder, CO, Downtown Management Commission
- Responsibilities:
  - Parking construction and management
  - Operates full menu of demand management strategies
- District analyzes most cost-effective mix of new parking or transportation alternatives
- Cheaper to provide free transit to all downtown employees than provide them parking
- Provides buying power/negotiating strength for small businesses

Phase out Minimum Parking Requirements

- Minimum parking requirements set to avoid any chance of spillover
- Usually copy nearby cities, or look up in reference manuals
- Take peak demand, and round up



How much is enough?

- No right answer
- No such thing as set "demand" for parking:
  - Pricing
  - Availability of Parking
  - Travel Choices
- Supply is a value judgment based on wider community goals
- Don't confuse supply and availability

Select Minimum Parking Requirements

- Gas Station – 1.5 spaces per fuel nozzle
- Nunnery – one space per ten nuns
- Mausoleum – 10 spaces per maximum number of interments in a one-hour period
- Swimming pool – 1 space per 2,500 gallons of water

TABLE 3-4

PATAPHYSICAL PARKING REQUIREMENTS

Land use	Parking requirement
Adult entertainmer	1 space per patron, plus 1 space per employee on the largest working shift
Barber shop	2 spaces per barber
Beauty shop	3 spaces per beautician
Bicycle repair	3 spaces per 1,000 square feet
Bowling alley	1 space for each employee and employer, plus 5 spaces for each lane
Gas station	1.5 spaces per fuel nozzle
Health home	1 space per 3 beds and bassinettes, plus 1 space per 3 employees, plus 1 space per staff doctor
Heating supply	3.33 spaces for every 1,000 square feet of sales and office area, plus 2 spaces per 3 employees on the maximum shift, plus 1 space for every vehic customarily used in operation of the use or stored on the premises
Heliport	1 space per 5 employees, plus 5 spaces per touchdown pad
Machinery sales	1 space per 500 square feet of enclosed sales/rental floor area, plus 1 space per 2,500 square feet of open sales/rental display lot area, plus 2 spaces per service bay, plus 1 space per employee, but never less than 5 spaces
Mausoleum	10 spaces per maximum number of interments in a one-hour period
Nunnery	1 space per 10 nuns
Rectory	3 spaces per 4 clergymen
Swimming pool	1 space per 2,500 gallons of water
Taxi stand	1 space for each employee on the largest shift, plus 1 space per taxi, plus sufficient spaces to accommodate the largest number of visitors that may be expected at any one time
Tennis court	1 space per player

Sources: Planning Advisory Service (1964, 1971, and 1991); Witheford and Kanaan (197

ITE Rates

- Based on locations with no transit accessibility, no adjacent land uses
- R^2 of 0.038 means that variation in floor area explains only 3.8 percent of variation in peak parking demand.
- Parking generation rate is reported as precisely 9.95 spaces per 1,000 square feet, not 10 but 9.95.

FIGURE 2

FAST FOOD RESTAURANT WITH DRIVE-IN WINDOW (836)

Peak Parking Spaces Occupied vs: 1,000 GROSS SQUARE FEET LEASABLE AREA

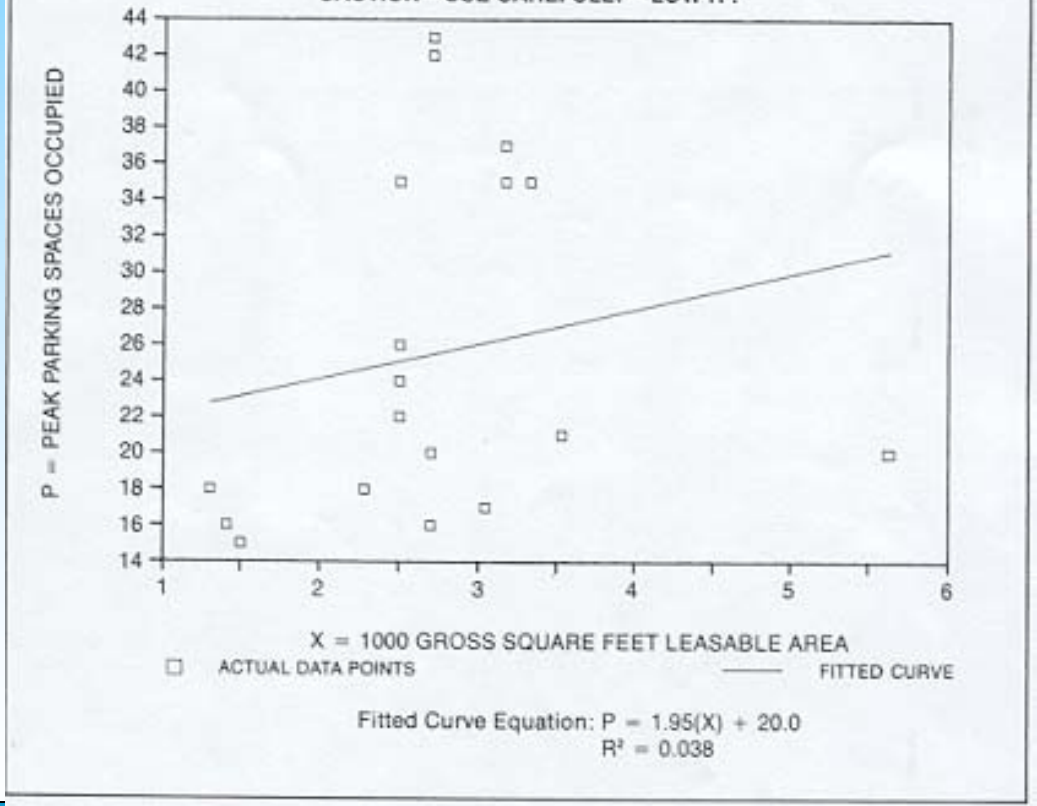
On a: WEEKDAY

PARKING GENERATION RATES

Average Rate	Range of Rates	Standard Deviation	Number of Studies	Average 1,000 GSF Leasable Area
9.95	3.55–15.92	3.41	18	3

DATA PLOT AND EQUATION

CAUTION—USE CAREFULLY—LOW R^2.

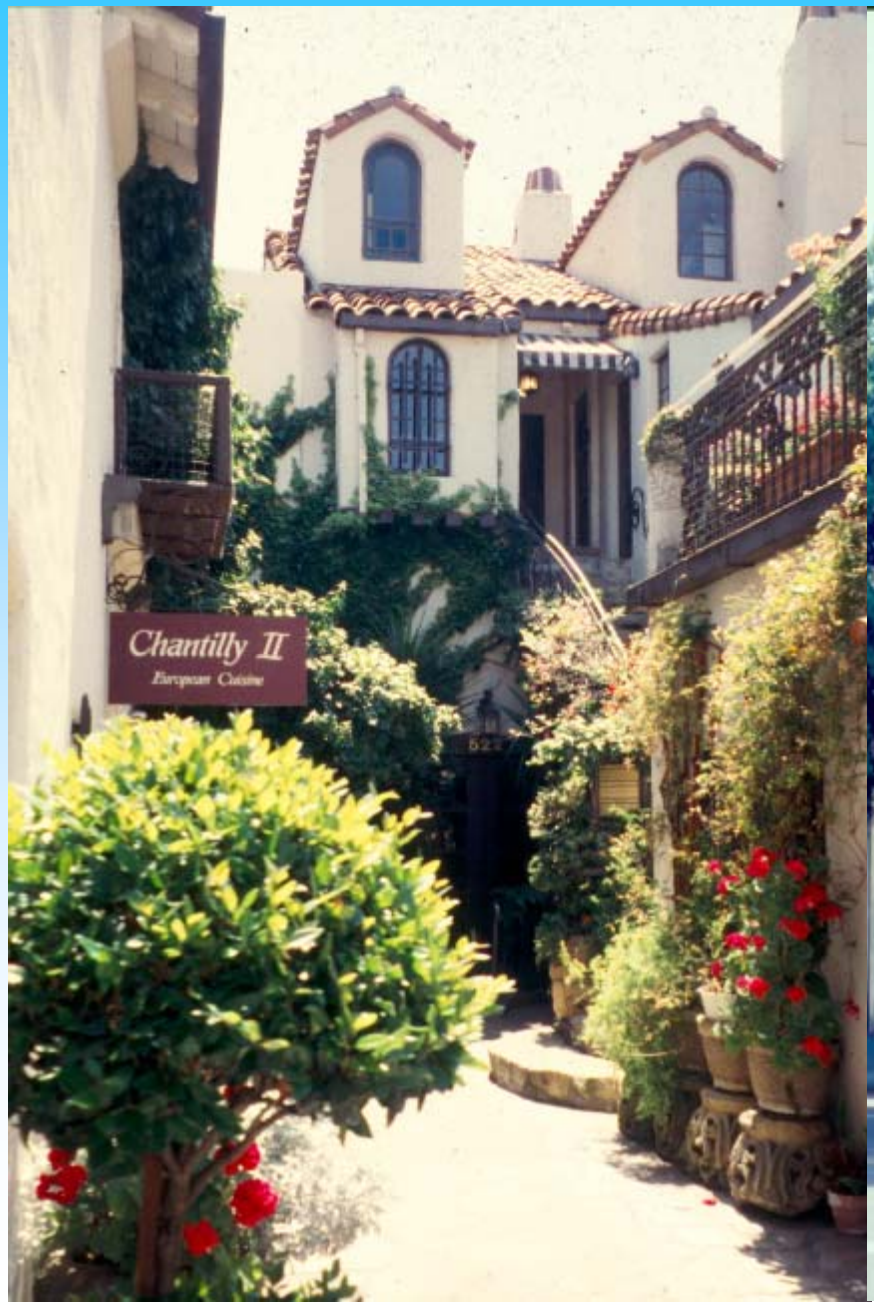


Fitted Curve Equation: P = 1.95(X) + 20.0

R^2 = 0.038

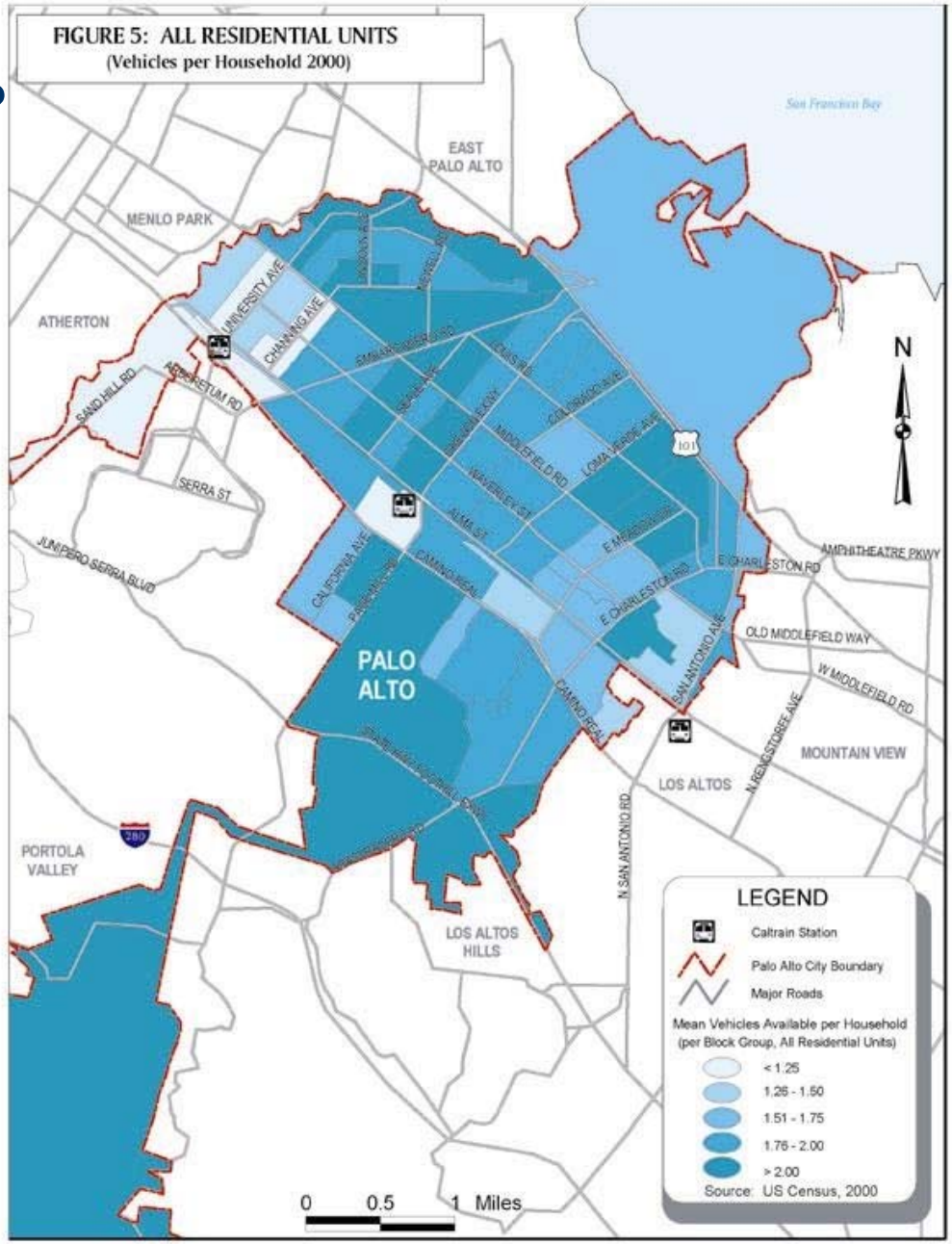
Parking Generation/Institute of Transportation Engineers/1987/page 146

Palo Alto, CA – parking requirements adopted in 1951



Tailor Parking Requirements?

- Parking demand varies with geographic factors:
  - Density
  - Transit Access
  - Income
  - Household size
- Cities can tailor parking requirements to meet demand, based on these factors
- Does not seek to *constrain* demand



Abolish Parking Requirements?

Reviving neighborhoods by abolishing minimum parking requirements

- Coral Gables, FL
- Eugene, OR
- Fort Myers, FL
- Fort Pierce, FL
- United Kingdom (entire nation)
- Los Angeles, CA
- Milwaukee, WI
- Olympia, WA
- Portland, OR
- San Francisco, CA
- Stuart, FL
- Seattle, WA
- Spokane, WA

Parking Maximums?

- Promotes alternatives to driving
- Maximizes land area for other uses
- Examples: downtown San Francisco; Portland, OR; Cambridge; all of UK
- Aside from congestion pricing, parking management is the *only* useful tool for eliminating congestion

Arlington, VA - Residential Parking Districts

Arlington, VA - Parking and Form-Based Codes

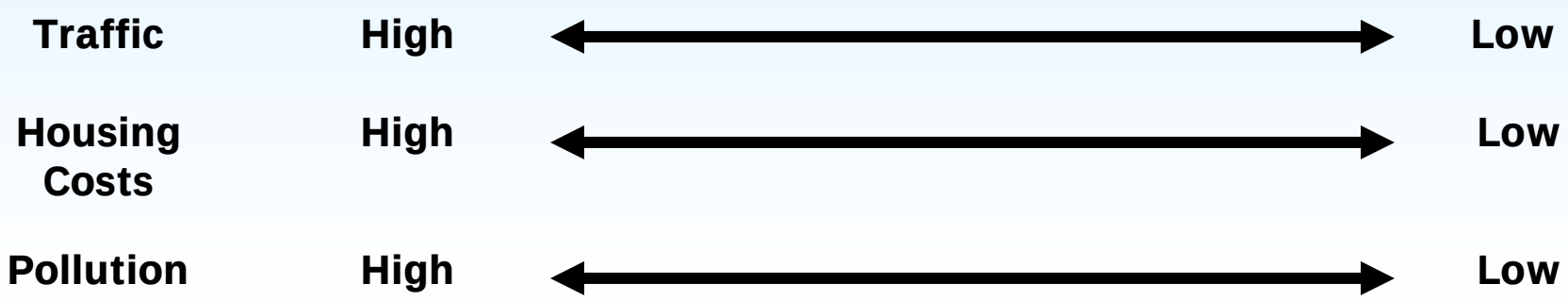
- Clear Goals
- Minimums and maximums for shared and reserved parking
- Small sites exempted
- Off-site parking allowed
- In lieu fees allowed

San Francisco, CA – Parking and housing affordability

- Goals: More affordable housing, less traffic
- Each parking space per unit
  - Reduces the number of units on a typical lot by 20%
  - Increases the cost of a typical unit by 20%
  - Supports displacement
- In downtown residential neighborhoods:
  - No minimum parking requirement
  - Maximum of 0.25 – 0.75 spaces per unit
  - Must be underground or “wrapped”
  - No curb cuts on transit or pedestrian priority streets
  - 1:1 allowable, but requires parking to be leased separate from unit

Parking: High & Low Traffic Strategies

	Typical Minimum Requirements	'Tailored' Minimum Requirements	Abolish Minimum Requirements	Set Maximum Requirements
Typical Tools	• Requirement > Average Demand • Hide all parking costs	Adjust for: • Density • Transit • Mixed Use • 'Park Once' District • On-street spaces • ...etc.	• Market decides • Garages funded by parking revenues • Manage on-street parking • Residential pkg permits allowed by vote	• Limit parking to road capacity • Manage on-street parking • Market rate fees encouraged/ required



Making the Transition

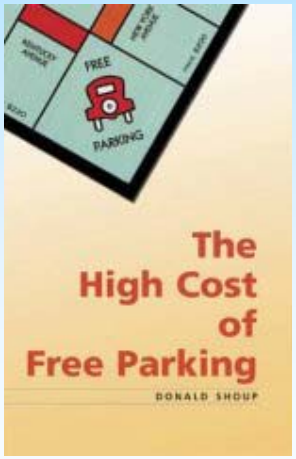
- Manage spillover
- Give curbspace a value
- Popular alternatives – cash out, car-sharing
- Relate parking policies to community goals
- Address equity
- Stakeholder and community outreach

But where will the poor people park?

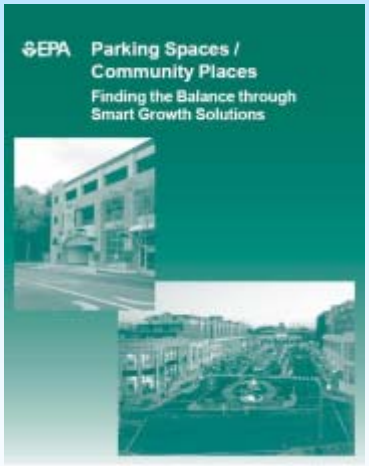
- Address social equity concerns directly:
- Calculate the relationship between household income and auto ownership in your own community. Look at race, age and ability, too!
- Parking is never free. Should its costs be hidden in the cost of housing? The cost of food and goods?
- Emphasize net social equity impacts, not anecdotal individual impacts. The current situation is always less equitable than a well managed parking program.
- Pay attention to where parking revenue goes; use it to fund services and projects that benefit low income people.

New Resources are Available

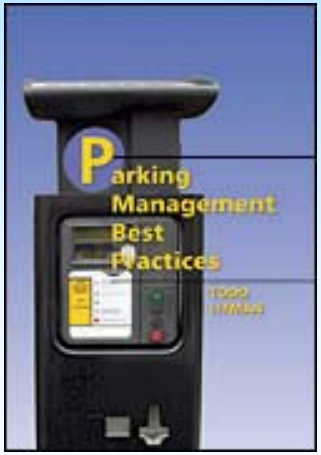
- "The High Cost of Free Parking"
- By Don Shoup, UCLA
- Top 100k on Amazon
- 576 pages
- $60 from APA



- "Parking Spaces / Community Places"
- Free from US EPA
- 70 pages



- "Parking Management"
- By Todd Litman
- Available at APA Bookstore or Amazon



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